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Attorney Docket No.:SONY-11300

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Group Art Unit: 2612
Quan Vu et al.	Examiner: Wilson, J.
Serial No.: 09/249,642	**TRANSMITTAL LETTER**
Filed: February 12, 1999	162 North Wolfe Road Sunnyvale, California 94086 (408) 530-9700
For: **METHOD OF AND APPARATUS FOR GENERATING A PRECISE FRAME RATE IN DIGITAL VIDEO TRANSMISSION FROM A COMPUTER SYSTEM TO A DIGITAL VIDEO DEVICE**	Customer Number 28960

MS: Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed please find a response to the communication mailed on December 2, 2005 for filing with the U.S. Patent and Trademark Office. Also attached is U.S. Patent No. 6,373,821, an office action dated June 4, 2004 and a preliminary amendment that was filed on April 30, 2004 accordingly.

The Commissioner is authorized to charge any additional fee or credit any overpayment to our Deposit Account No. 08-1275. **An originally executed duplicate of this transmittal is enclosed for this purpose.**

Respectfully submitted,
HAVERSTOCK & OWENS LLP

Dated: December 12, 2005

By: Jonathan O. Owens
Jonathan O. Owens
Reg. No.: 37,902

Attorneys for Applicants

CERTIFICATE OF MAILING (37 CFR§ 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP.

Date: 12-12-05 By:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	Group Art Unit: 2612
Quan Vu *et al.*	Examiner: Wilson, J.
Serial No. 09/249,642	
Filed: February 12, 1999	**APPEAL BRIEF**
For: **METHOD OF AND APPARATUS FOR GENERATING A PRECISE FRAME RATE IN DIGITAL VIDEO TRANSMISSION FROM A COMPUTER SYSTEM TO A DIGITAL VIDEO DEVICE**	162 N. Wolfe Rd. Sunnyvale, CA 94086 (408) 530-9700
	Customer No. 28960

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In furtherance of patent owner's Notice of Appeal filed on August 27, 2004, and in response to the Notification of Non-Compliant Appeal Brief dated December 2, 2005, a revised compliant Appeal Brief is submitted herewith. This Appeal Brief is written in support of the patent owner's Notice of Appeal filed on August 27, 2004, and further pursuant to the rejection mailed on June 4, 2004.

Claims 1, 2, 4-8 and 10-32 have been rejected. The appellant submits this brief to the Board of Patent Appeals and Interferences in compliance with the requirements of 37 C.F.R. § 1.192. The appellant contends that the rejection of Claims 1, 2, 4-8 and 10-32 in this pending application is in error and should be overcome by this appeal.

I. REAL PARTY IN INTEREST

As the assignees of the entire right, title and interest in the above-captioned patent application, the real parties in interest in this appeal are the following parties:

Sony Corporation, a Japanese Corporation
6-7-35 Kitashinagawa, Shinagawa
Tokyo, 141
Japan

Sony Electronics Inc., a corporation of the State of Delaware
1 Sony Drive
Park Ridge, NJ 07656-8003

per the assignment document recorded on February 12, 1999 at reel number 9780 and frame number 0990.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences related to the present patent application of which appellant is aware.

III. STATUS OF CLAIMS

Claims 1, 2, 4-8 and 10-32 are pending within this application. Claims 1, 2, 4-8, 10-20, 23-25 and 28-31 stand rejected under 35 U.S.C. § 102 (e). Claims 21, 22, 26, 27 and 32 stand rejected under 35 U.S.C. § 103 (a).

The rejections of Claims 1, 2, 4-8 and 10-32 are being appealed.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the Office Action of June 4, 2004. The present condition of the claims is as listed in the Preliminary Amendment filed on April 30, 2004.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The instant invention is claimed and separately argued in the independent claims 1, 6, 13, 17, 26, and 27. Furthermore, the dependent claims 21, 22, and 28 to 32 are argued separately.

However, claims 21 and 22 are argued separately only as a matter of form. A concise explanation of the subject matter of each of these claims is provided below. References in this section are noted in brackets and refer to the original specification of the instant application.

Claim 1 describes a method of transmitting information from a source device at a predetermined rate. The method comprises: calculating a ratio of first data blocks to second data blocks to achieve the predetermined rate [Page 4, lines 2-4, page 9, equation 1]; forming x number of the first data blocks, each of which contains n units of data, and forming y number of the second data blocks, each of which contains m units of data, with m not equal to n [page 4, lines 6-10]; combining the first data blocks and the second data blocks into a data stream with the first data blocks evenly distributed among the second data blocks to form a repeating pattern [page 4, lines 12-15, page 10, lines 12-22, FIG. 6].

Claim 28 relates to a method of claim 1 wherein the receiving device determines the predetermined rate [page 4, lines 1-2].

Claim 6 describes a method of transmitting information from a source device to a receiving device. The method comprises: calculating a ratio of first frames to second frames to achieve a predetermined frame rate [Page 4, lines 2-4, page 9, equation 1]; forming x number of first frames, each containing n units of data, and forming y number of second frames, each containing m units of data, with m not equal to n [page 4, lines 6-10]; combining the first frames and the second frames into a stream of frames with the first frames evenly distributed among the second frames to form a repeating pattern [page 4, lines 12-15, page 10, lines 12-22, FIG. 6].

Claim 29 relates to a method of claim 6 wherein the receiving device determines the predetermined rate [page 4, lines 1-2].

Claim 13 describes a source device comprising a controller for calculating a ratio of first frames to second frames to achieve the predetermined frame rate [Page 4, lines 2-4, page 9, lines 5-13, equation 1, FIGS. 1, 2, 4 and 5]. The controller also generates a data stream containing a plurality of first frames each including x packets of data and a plurality of second frames each including y packets of data, with x not equal to y, to achieve the predetermined rate [page 4, lines 6-10, page 9, lines 15-20]. The first frames are evenly distributed among the second frames, thereby forming a repeating pattern [page 4, lines 12-15, page 10, lines 1-4].

Claim 30 relates to a source device of claim 13 wherein the receiving device determines the predetermined rate [page 4, lines 1-2].

Claim 17 describes a system for transmitting information at a predetermined frame rate. The system includes a source device, and a remote receiver [page 4, lines 2-4, page 9, lines 5-13, FIGS. 1, 2, 4 and 5]. The source device calculates a ratio of first frames to second frames to

achieve the predetermined frame rate [page 4, lines 2-4, page 9, lines 5-13, equation 1]. The source device also generates a data stream containing a plurality of first frames each including x packets of data and a plurality of second frames each including y packets of data, with x not equal to y, to achieve the predetermined rate [page 4, lines 6-10, page 9, lines 15-20]. The first frames are evenly distributed among the second frames, thereby forming a repeating pattern [page 4, lines 12-15, page 10, lines 1-4]. The remote receiver is configured to receive the data stream at the predetermined frame rate [page 4, lines 15-16].

As mentioned above, claims 21 and 22 are argued separately only as a matter of form. The citations above support the subject matter of claims 21 and 22.

Claim 31 relates to a system of claim 17 wherein the predetermined frame rate is determined by the remote receiver [page 4, lines 1-2].

Claim 26 describes a system for transmitting information at a predetermined frame rate equal to 29.97 frames per second within an IEEE 1394 network of devices. The system includes a source device and a remote receiver [page 4, lines 2-4, page 9, lines 5-13, FIGS 1, 2, 4 and 5]. The source device calculates a ratio of first frames to second frames to achieve the predetermined frame rate of 29.97 frames per second [page 9, lines 5-13, equation 1]. The source device also generates a data stream containing a 9336 first frames each including 267 packets of data and 664 second frames each including 266 packets of data, to achieve the predetermined rate of 29.97 frames per second [page 9, lines 15-20]. The first frames are evenly distributed among the second frames, thereby forming a repeating pattern [page 10, lines 1-4]. The remote receiver is configured to receive the data stream at the predetermined frame rate [page 4, lines 15-16].

Claim 27 describes a method of transmitting information from a source device to a receiving device over an IEEE 1394 network of devices [page 4, lines 2-4, page 9, lines 5-13, FIGS. 1, 2, 4 and 5]. The method comprises: calculating a ratio of first frames to second frames [page 9, lines 5-13, equation 1]; forming 9336 first frames each including 267 packets of data and 664 second frames each including 266 packets of data, [page 9, lines 15-20]; combining the 9336 first frames and the 664 second frames into a stream of frames to achieve the predetermined rate of 29.97 frames per second by evenly distributing the second frames among the first frames thereby forming a repeating pattern of the first frames and the second frames [page 10, lines 1-4]; and transmitting the stream of frames from the source device to the receiving device over the IEEE 1394 network of devices [page 4, lines 15-16].

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection for review by the Board of Patent Appeals and Interferences are as follows:

1. Whether the Claims 1, 2, 4-8, 10-20, 23-25 and 28-31 are properly rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,373,821 to Staats (hereinafter "Staats"); and
2. Whether the Claims 21, 22, 26, 27 and 32 are properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Staats.

VII. ARGUMENT

The claims pending for appeal in the present application do not stand or fall together.

Regarding the rejection of Claims 1, 2, 4-8, 10-20, 23-25 and 28-31 under 35 U.S.C. § 102(e) as being anticipated by Staats, Claims 1, 2, 4-8, 10-20, 23-25 and 28-31 do not stand or fall together because they each contain different limitations. Appellant sets forth below why the claims are believed to be separately patentable, and therefore should not stand or fall according to the grouping of the claims presented in this rejection. Relevant to this rejection under 35 U.S.C. § 102(e): Claims 1, 2, 4 and 5 can be grouped together; Claims 6-8 and 10-12 can be grouped together; Claims 13-16 can be grouped together; and Claims 17-20 and 23-25 can be grouped together. Claims 28-31 should each stand on their own.

Regarding the rejection of Claims 21, 22, 26, 27 and 32 under 35 U.S.C. § 103(a) as being unpatentable over Staats, Claims 21, 22, 26, 27 and 32 do not stand or fall together because they each contain different limitations. Appellant sets forth, in the argument section of the brief, why the claims are believed to be separately patentable, and therefore should not stand or fall according to the grouping of the claims presented in this rejection.

A. Claims 1, 2, 4-8, 10-20, 23-25 and 28-31 Are Patentable Over Staats

Within the Office Action, Claims 1, 2, 4-8, 10-20, 23-25 and 28-31 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Staats. Staats teaches a method for setting a time stamp in the SYT field of packet headers for IEEE-1394 devices. [Staats, Title] Staats teaches stamping isochronous data packets with a presentation time stamp value determined according to a computed packet rate for the data. [Staats, col. 2, lines 45-48] Staats teaches that a computed packet rate for the data can be a non-integer value. [Staats, col. 5, lines 64-65, col. 6, lines 7-8] To achieve this non-integer value, Staats teaches using a data stream command language. [Staats, col. 6, lines 14-16] The data stream command language is a set of commands

that control data flow into or out of a data stream. [Staats, col. 6, lines 16-20] Staats teaches that the data stream command language jump commands are used to allow a transmitter to send a frame with a different number of packets. [Staats, col. 6, lines 27-32] Staats does not teach forming x number of first data blocks each containing n units of data, forming y number of second data blocks each containing m units of data and combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate.

Staats teaches that sometimes the transmitter will need to send 266 packets/ frame and sometimes 267 packets/frame. [Staats, col. 6, lines 7-16] Staats teaches that the system determines when the driver should be notified to vary the default number of packets per frame, on a frame by frame basis. [Staats, col. 8, lines 21-67] Specifically, Staats teaches calculating a delta value for each frame, such that if the delta value is equal to or greater than one, a frame with 267 packets is transmitted and if the delta value is less than one, a frame with 266 packets is transmitted. [Staats, col. 8, lines 54-61] In the example, illustrated in Table 1 of Staats, three frames with 266 packets are followed by one frame of 267 packets, then one frame of 266 frames and then one frame of 267 packets. Accordingly, as explicitly shown in this example, Staats does not teach that the frames with 267 packets are evenly distributed among the frames with 266 packets within the data stream, as claimed in the present claims.

Staats teaches calculating an SYT value for a current frame and then calculating the delta value for the current frame, on a frame by frame basis. Staats does not teach evenly distributing x number of first data blocks among y number of second data blocks thereby forming a repeating pattern of the first data blocks and the second data blocks within the data stream. In contrast, as described above, in the present application it is taught that after every fourteen frames from a first group of frames (A), one frame from a second group of frames (B) is inserted. [Present Specification, page 10, lines 12-22, Figure 6] It is further taught in the present application that this repeating pattern of fourteen frames from the first group of frames (A) interrupted by one frame from the second group of frames (B), continues as long as the data stream is transmitted. This is an evenly distributed, repeating pattern of frames. Such an evenly distributed, repeating pattern of frames is not taught by Staats.

Within the Office Action, a position has been taken that Staats teaches that over a period of time, the sequence of data blocks will eventually repeat itself. No where is this taught, hinted at or suggested in the actual teachings of Staats. As discussed above, Staats teaches calculating the delta value for each frame and making a determination based on the delta value as to whether a frame with 267 packets or a frame with 266 packets should be transmitted. Based on this scheme taught by Staats, one cannot **assume** that a pattern will eventually repeat over time, no

matter how long the time period. In fact, Staats goes further and even describes what happens when a cycle is missed. This repeating sequence argument, made within the Office Action, does not take such events into account and thus fails when the actual teachings of Staats are analyzed.

Staats teaches that sometimes cycles are missed and a packet is not transmitted every cycle. [Staats, col. 9, line 64- col. 10, line 5] Staats teaches that in the event of a missed cycle "M should be held at 266 to accommodate the missed cycle." [Staats, col. 10, lines 22-23] Staats further teaches that "[t]o accommodate the possibility that missed cycles may occur, the actual cycle # that a frame begins transmission on must be determined and accounted for." [Staats, col. 10, lines 42-44] Thus, Staats teaches that missed cycles must be accounted for and may effect the determined number of packets for a frame or frames in order to maintain the appropriate packet rate.

The position which has been taken within the Office Action regarding an assumed repeating pattern does not follow the teachings of Staats. Staats simply teaches calculating a delta value for each frame and determining on a frame-by-frame basis as to whether a frame with 267 packets or a frame with 266 packets should be transmitted. Staats also teaches that missed cycles must be accounted for in this process. A projected calculation as listed within the Office Action, does not take all of these factors into account, but instead manipulates the data to attempt to provide a basis for the improper rejection of the pending claims based on Staats. It should be further noted that even this improper projected calculation within the Office Action does not show that frames of the second group are evenly distributed, as taught and claimed in the present application.

Further, as shown even in the example taught by Staats, the frames are not evenly distributed. As described above, in the example taught by Staats, there are three frames with 266 packets, followed by one frame of 267 packets, followed by a single frame with 266 packets and a single frame with 267 packets. Thus, the frames of 267 packets are not evenly distributed among the frames of 266 packets.

There is nothing in the teachings of Staats that supports an anticipation rejection under 35 U.S.C. § 102 of claims with such limitations. Staats simply does not teach evenly distributing the x number of first data blocks among the y number of second data blocks. Staats also does not teach that this even distribution forms a repeating pattern of the first data blocks and the second data blocks within the data stream. As described above, Staats teaches determining the number of packets per frame on a frame by frame basis using a calculated delta value. Also, as described above, the example shown in Table 1 of Staats does not show an even distribution or a repeating pattern, even before missed cycles are accounted for.

As described above, Staats teaches determining, on a frame by frame basis, what number of packets will be included within a frame. The teachings of Staats require this determination to be made for every frame. In contrast to the teachings of Staats, the present invention calculates a ratio of first frames and second frames in response to the particular frame rate. It is taught within the present specification that

> [t]he source device preferably determines a proper ratio of data packets versus video frames in response to the particular frame rate required and a cycle time for isochronous data. This proper ratio of data packets versus video frames rarely computes to an integer result. Accordingly, once the proper ratio of data packets versus video frames is determined, the source device preferably generates two groups of frames. [Present Specification, page 4, lines 2-6]

Staats does not teach calculating a ratio of first frames and second frames. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. Further, Staats does not teach calculating a ratio before forming the two groups of frames.

Claims 1, 2, 4, and 5

The independent Claim 1 is directed to a method of transmitting information from a source device at a predetermined rate. The method of Claim 1 comprises calculating a ratio of first data blocks to second data blocks to achieve the predetermined rate, forming x number of the first data blocks wherein each of the first data blocks contains n units of data, forming y number of the second data blocks wherein each of the second data blocks contains m units of data, and further wherein m is not equal to n and combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate. Claim 1 includes the further limitation that the first data blocks and the second data blocks are of a same type and have same characteristics. Claim 1 also includes the limitation that the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first data blocks and the second data blocks within the data stream. As described above, Staats does not teach forming x number of first data blocks each containing n units of data, forming y number of second data blocks each containing m units of data and combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate. As also described above, Staats does not teach that the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first data blocks and the second data blocks within the data stream. Further, Staats does not teach **calculating a ratio** of first data blocks to second data

blocks to achieve the predetermined rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 1 is allowable over the teachings of Staats.

Claims 2, 4 and 5 are all dependent upon the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Staats. Accordingly, Claims 2, 4 and 5 are all also allowable as being dependent upon an allowable base claim.

Claims 6-8 and 10-12

The independent Claim 6 is directed to a method of transmitting information from a source device to a receiving device. The method of Claim 6 comprises calculating a ratio of first frames to second frames to achieve a predetermined frame rate, forming x number of the first frames wherein each of the first frames contains n units of data, forming y number of the second frames wherein each of the second frames contains m units of data and further wherein m is not equal to n, combining x number of the first frames and y number of the second frames into a stream of frames to achieve the predetermined frame rate by **evenly distributing** the x number of the first frames among the y number of the second frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames and transmitting the stream of frames from the source device to the receiving device. Claim 6 includes the further limitation that the first frames and the second frames are of a same type and have same characteristics. As described above, Staats does not teach forming x number of first frames wherein each of the first frames contains n units of data, forming y number of second frames wherein each of the second frames contains m units of data and combining x number of the first frames and y number of the second frames into a stream of frames to achieve a predetermined rate. As discussed above, Staats also does not teach **evenly distributing** the x number of first frames among the y number of second frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames. Further, Staats does not teach **calculating a ratio** of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 6 is allowable over the teachings of Staats.

Claims 7, 8 and 10-12 are all dependent upon the independent Claim 6. As discussed above, the independent Claim 6 is allowable over the teachings of Staats. Accordingly, Claims 7, 8 and 10-12 are each also allowable as being dependent upon an allowable base claim.

Claim 13-16

The independent Claim 13 is directed to a source device for transmitting information at a predetermined frame rate. The source device of Claim 13 comprises a controller for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing a plurality of the first frames each including x packets of data and a plurality of the second frames each including y packets of data to achieve the predetermined frame rate, wherein the data stream is transmitted at the predetermined frame rate and y is not equal to x. Claim 13 includes the further limitation that the first frames and the second frames are of a same type and have same characteristics. It is also specified in Claim 13 that the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream. As described above, Staats does not teach generating a data stream including a plurality of first frames each including x packets of data and a plurality of second frames each including y packets of data to achieve the predetermined frame rate. As also described above, Staats does not teach that the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream. Further, Staats does not teach **calculating a ratio** of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 13 is allowable over the teachings of Staats.

Claims 14-16 are all dependent upon the independent Claim 13. As discussed above, the independent Claim 13 is allowable over the teachings of Staats. Accordingly, Claims 14-16 are each also allowable as being dependent upon an allowable base claim.

Claim 17-20 and 23-25

The independent Claim 17 is directed to a system for transmitting information at a predetermined frame rate. The system of Claim 17 comprises a source device for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing a plurality of first frames each including x packets of data and a plurality of second frames each including y packets of data to achieve the predetermined frame rate and y is not equal to x, wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are **evenly distributed** among the y

number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream, and a remote receiver coupled to the source device and configured to receive the data stream at the predetermined frame rate. As described above, Staats does not teach generating a data stream containing a plurality of first frames each including x packets of data and a plurality of second frames each including y packets of data to achieve the predetermined frame rate and y is not equal to x. As discussed above, Staats also does not teach that the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream. Further, Staats does not teach **calculating a ratio** of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 17 is allowable over the teachings of Staats.

Claims 18-20 and 23-25 are all dependent on the independent Claim 17. As discussed above, the independent Claim 17 is allowable over the teachings of Staats. Accordingly, Claims 18-20 and 23-25 are each also allowable as being dependent upon an allowable base claim.

Claim 28

Claim 28 is dependent on the independent Claim 1 and adds a further limitation specifying that the predetermined rate is determined by a receiving device which receives the data stream. As described above, it is taught within the present application that the receiving device determines the particular, desired frame rate. [Present Specification, page 4, lines 1-2] Staats does not teach that the receiving device determines the predetermined rate. For at least these reasons, the Claim 28 is allowable over the teachings of Staats.

As an additional basis for allowability, Claim 28 is dependent on the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Staats. Accordingly, Claim 28 is also allowable as being dependent upon an allowable base claim.

Claim 29

Claim 29 is dependent on the independent Claim 6 and adds a further limitation specifying that the predetermined rate is determined by the receiving device. As described above, it is taught within the present application that the receiving device determines the particular, desired frame rate. [Present Specification, page 4, lines 1-2] Staats does not teach that the receiving device determines the predetermined rate. For at least these reasons, the Claim 29 is allowable over the teachings of Staats.

As an additional basis for allowability, Claim 29 is dependent on the independent Claim 6. As discussed above, the independent Claim 6 is allowable over the teachings of Staats. Accordingly, Claim 29 is also allowable as being dependent upon an allowable base claim.

Claim 30

Claim 30 is dependent on the independent Claim 13 and adds a further limitation specifying that the predetermined rate is determined by a receiving device which receives the data stream. As described above, it is taught within the present application that the receiving device determines the particular, desired frame rate. [Present Specification, page 4, lines 1-2] Staats does not teach that the receiving device determines the predetermined rate. For at least these reasons, the Claim 30 is allowable over the teachings of Staats.

As an additional basis for allowability, Claim 30 is dependent on the independent Claim 13. As discussed above, the independent Claim 13 is allowable over the teachings of Staats. Accordingly, Claim 30 is also allowable as being dependent upon an allowable base claim.

Claim 31

Claim 31 is dependent on the independent Claim 17 and adds a further limitation specifying that the predetermined rate is determined by the remote receiver. As described above, it is taught within the present application that the receiving device determines the particular, desired frame rate. [Present Specification, page 4, lines 1-2] Staats does not teach that the receiving device determines the predetermined rate. For at least these reasons, the Claim 31 is allowable over the teachings of Staats.

As an additional basis for allowability, Claim 31 is dependent on the independent Claim 17. As discussed above, the independent Claim 17 is allowable over the teachings of Staats. Accordingly, Claim 31 is also allowable as being dependent upon an allowable base claim.

B. Claims 21, 22, 26, 27 and 32 Are Patentable Over Staats

Within the Office Action, Claims 21, 22, 26, 27 and 32 have been rejected under 35 U.S.C. §103 (a) as being unpatentable over Staats.

Claims 21 and 22

Claims 21 and 22 are both dependent on the independent Claim 17. As discussed above, the independent Claim 17 is allowable over the teachings of Staats. Accordingly, Claims 21 and 22 are both also allowable as being dependent upon an allowable base claim.

Claim 26

The independent Claim 26 is directed to a system for transmitting information at a predetermined frame rate equal to 29.97 frames per second within an IEEE 1394 network of devices. The system of Claim 26 comprises a source device for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing 9336 first frames, each including 267 packets of data, and 664 second frames, each including 266 packets of data, to achieve the predetermined frame rate of 29.97 frames per second, wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of first frames and second frames within the data stream, and a remote receiver coupled to the source device by the IEEE 1394 network of devices, wherein the remote receiver receives the data stream from the source device at the predetermined frame rate. As recognized with the Office Action, Staats fails to disclose a data stream containing 9336 first frames and 664 second frames. It is stated in the Office Action that this is an obvious matter of design choice. The applicants respectfully disagree.

Staats cites an NTSC compatible device with 266.973 data packets per frame, as an example. [Staats, col. 5, line 64 - col. 6, line 12] However, as discussed above, Staats only teaches that sometimes the transmitter will need to send 266 packets/frame and sometimes 267 packets/frame. As evidence that the limitation of a data stream containing 9336 first frames, each including 267 packets of data, and 664 second frames, each including 266 packets of data, is not an obvious design choice, even though Staats cites as an example an NTSC compatible device with 266.973 data packets per frame, Staats does not describe such a data stream with 9336 first frames and 664 second frames. Even the projected calculation within the Office Action, which uses 266.973 and portends to follow the teachings of Staats, does not arrive at a data stream with 9336 first frames and 664 second frames.

As discussed above, Staats only teaches that sometimes the transmitter will need to send 266 packets/frame and sometimes 267 packets/frame. Accordingly, Staats does not teach or make obvious a source device for generating a data stream containing 9336 first frames, each including 267 packets of data, and 664 second frames, each including 266 packets of data. As

discussed above, Staats also does not teach or make obvious **evenly distributing** the x number of first frames among the y number of second frames thereby forming a repeating pattern of first frames and second frames within the data stream. Further, Staats does not teach **calculating a ratio** of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 26 is allowable over the teachings of Staats.

Claim 27

The independent Claim 27 is directed to a method of transmitting information from a source device to a receiving device over an IEEE 1394 network of devices. The method of Claim 27 comprises calculating a ratio of first frames to second frames, forming 9336 first frames wherein each of the first frames contains 267 packets of data, forming 664 second frames wherein each of the second frames contains 266 packets of data, combining the 9336 first frames and the 664 second frames into a stream of frames to achieve a predetermined frame rate of 29.97 frames per second by **evenly distributing** the second frames among the first frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames and transmitting the stream of frames from the source device to the receiving device over the IEEE 1394 network of devices, wherein the first frames and the second frames are of a same type and have same characteristics. As described above, Staats does not teach or make obvious forming 9336 first frames wherein each of the first frames contains 267 packets of data, forming 664 second frames wherein each of the second frames contains 266 packets of data and combining the 9336 first frames and the 664 second frames into a stream of frames to achieve a predetermined frame rate of 29.97 frames per second. As also described above, even the projected calculation within the Office Action, which uses 266.973 and portends to follow the teachings of Staats, does not arrive at a data stream with 9336 first frames and 664 second frames.

As described above, Staats does not teach **evenly distributing** the second frames among the first frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames. Further, Staats does not teach **calculating a ratio** of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 27 is allowable over the teachings of Staats.

Claim 32

Claim 32 is dependent on the independent Claim 26 and adds a further limitation specifying that the predetermined rate is determined by the remote receiver. As described above, it is taught within the present application that the receiving device determines the particular, desired frame rate. [Present Specification, page 4, lines 1-2] Staats does not teach that the receiving device determines the predetermined rate. For at least these reasons, the Claim 32 is allowable over the teachings of Staats.

As an additional basis for allowability, Claim 32 is dependent on the independent Claim 26. As discussed above, the independent Claim 26 is allowable over the teachings of Staats. Accordingly, Claim 32 is also allowable as being dependent upon an allowable base claim.

C. CONCLUSION

It is therefore respectfully submitted that Claims 1, 2, 4-8 and 10-32 are allowable over the teachings of Staats. Therefore, a favorable indication is respectfully requested.

VIII. CLAIMS APPENDIX

Below is a true and accurate listing of the claims involved in this appeal.

1. A method of transmitting information from a source device at a predetermined rate, the method comprising:
   a. calculating a ratio of first data blocks to second data blocks to achieve the predetermined rate;
   b. forming x number of the first data blocks wherein each of the first data blocks contains n units of data;
   c. forming y number of the second data blocks wherein each of the second data blocks contains m units of data, and further wherein m is not equal to n; and
   d. combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate, wherein the first data blocks and the second data blocks are of a same type and have same characteristics and further wherein the x number of first data blocks are evenly distributed among the y number of second data blocks thereby forming a repeating pattern of the first data blocks and the second data blocks within the data stream.

2. The method according to claim 1 further comprising transmitting the data stream from the source device at the predetermined rate.

3. (canceled)

4. The method according to claim 1 wherein the data stream is digital video data.

5. The method according to claim 1 wherein n, m, x, and y are integer values.

6. A method of transmitting information from a source device to a receiving device, the method comprising:

a. calculating a ratio of first frames to second frames to achieve a predetermined frame rate;

b. forming x number of the first frames wherein each of the first frames contains n units of data;

c. forming y number of the second frames wherein each of the second frames contains m units of data, and further wherein m is not equal to n;

d. combining x number of the first frames and y number of the second frames into a stream of frames to achieve the predetermined frame rate by evenly distributing the x number of the first frames among the y number of the second frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames; and

e. transmitting the stream of frames from the source device to the receiving device;

wherein the first frames and the second frames are of a same type and have same characteristics.

7. The method according to claim 6 wherein n, m, x, and y are integer values.

8. The method according to claim 6 further comprising receiving the stream of frames from the network by the receiver at a predetermined frame rate and wherein the data stream conforms to standards of an IEEE 1394-1995 network.

9. (canceled)

10. The method according to claim 6 wherein the stream of frames conforms to standards of an IEEE 1394-1995 network.

11. The method according to claim 6 wherein the source device and the receiving device are coupled together within a network.

12. The method according to claim 11 wherein the network is an IEEE 1394-1995 network.

13. A source device for transmitting information at a predetermined frame rate, the source device comprising a controller for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing a plurality of the first frames each including x packets of data and a plurality of the second frames each including y packets of data to achieve the predetermined frame rate, wherein the data stream is transmitted at the predetermined frame rate and y is not equal to x and further wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are evenly distributed among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream.

14. The source device according to claim 13 wherein x and y are integer values.

15. The source device according to claim 13 further comprising an interface coupled to the controller and configured for connecting to a network.

16. The source device according to claim 15 wherein the network is a IEEE 1394-1995 network.

17. A system for transmitting information at a predetermined frame rate, the system comprising:

    a. a source device for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing a plurality of the first frames each including x packets of data and a plurality of the second frames each including y packets of data to achieve the predetermined frame rate and y is not equal to x, wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are evenly distributed among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream; and

    b. a remote receiver coupled to the source device and configured to receive the data stream at the predetermined frame rate.

18. The system according to claim 17 wherein x and y are integer values.

19. The system according to claim 17 wherein the source device is a computer system.

20. The system according to claim 17 wherein the remote receiver is a digital video camera.

21. The system according to claim 17 wherein the predetermined frame rate is 29.97 frames per second.

22. The system according to claim 17 wherein the plurality of first frames are 9336 frames, x packets represent 267 packets, the plurality of second frames are 664 frames, and y packets represent 266 packets.

23. The system according to claim 17 wherein the data stream conforms to standards of an IEEE 1394-1995 network.

24. The system according to claim 17 further comprising a network coupled between the source device and the remote receiver and configured to transmit the data stream.

25. The system according to claim 24 wherein the network is an IEEE 1394-1995 network.

26. A system for transmitting information at a predetermined frame rate equal to 29.97 frames per second within an IEEE 1394 network of devices, the system comprising:

a. a source device for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing 9336 first frames, each including 267 packets of data, and 664 second frames, each including 266 packets of data, to achieve the predetermined frame rate of 29.97 frames per second, wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are evenly distributed among the y number of second data blocks thereby forming a repeating pattern of first frames and second frames within the data stream; and

b. a remote receiver coupled to the source device by the IEEE 1394 network of devices, wherein the remote receiver receives the data stream from the source device at the predetermined frame rate.

27. A method of transmitting information from a source device to a receiving device over an IEEE 1394 network of devices, the method comprising:

a. calculating a ratio of first frames to second frames;

b. forming 9336 first frames wherein each of the first frames contains 267 packets of data;

c. forming 664 second frames wherein each of the second frames contains 266 packets of data;

d. combining the 9336 first frames and the 664 second frames into a stream of frames to achieve a predetermined frame rate of 29.97 frames per second by evenly distributing the second frames among the first frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames; and

e. transmitting the stream of frames from the source device to the receiving device over the IEEE 1394 network of devices;

wherein the first frames and the second frames are of a same type and have same characteristics.

28. The method according to claim 1 wherein the predetermined rate is determined by a receiving device which receives the data stream.

29. The method according to claim 6 wherein the predetermined frame rate is determined by the receiving device.

30. The source device according to claim 13 wherein the predetermined rate is determined by a receiving device which receives the data stream.

31. The system according to claim 17 wherein the predetermined frame rate is determined by the remote receiver.

32. The system according to claim 26 wherein the predetermined frame rate is determined by the remote receiver.

IX. EVIDENCE APPENDIX

The following documents, which were entered in the record by the Examiner at the locations noted, are attached for convenience:

1. U.S. Patent No. 6,373,821 to Staats; entered in the record by the Examiner on May 7, 2002 in the "Notice of References Cited" included with the Office Action mailed on that date.
2. The June 4, 2004 Office Action; entered in the record by the Examiner on June 4, 2004.
3. The April 30, 2004 Preliminary Amendment; entered in the record by the Examiner on May 3, 2004.

X. RELATED PROCEEDINGS APPENDIX

As stated above, there are no proceedings related to this appeal of which appellants are aware.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

Dated: December 12, 2005

By: _____
Jonathan O. Owens
Reg. No. 37,902
Attorneys for Applicants

CERTIFICATE OF MAILING (37 CFR§ 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/249,642	02/12/1999	QUAN A. VU	SONY-11300	1161

28960 7590 06/04/2004

HAVERSTOCK & OWENS LLP
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EXAMINER	
WILSON, JACQUELINE B	

ART UNIT	PAPER NUMBER
2612	32

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/249,642	VU ET AL.	
	Examiner	Art Unit	
	Jacqueline Wilson	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 May 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1,2,4-8 and 10-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1,2,4-8 and 10-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's arguments filed 05/03/04 have been fully considered but they are not persuasive. The applicant continues to argue that the prior art, Staats, fails to teach evenly distributing the x number of first data blocks among the y number of second data blocks. Please refer to the arguments in paper numbers 26 and 28. As for the applicants argument indicating that there is no hint, teaching or suggestion to even warrant an obviousness determination and to do so would be impermissibly use hindsight to make a rejection based on obviousness. Hindsight reasoning is inapplicable to this application and only refers to 35 USC § 103. The examiner's rejection is based solely on *35 USC § 102* in which the rejections are maintained below. As for the newly added limitation, Staats teaches calculating a ratio by determining when to insert 266 packets/frame in the data stream of 267 packets/frame. Therefore, the rejection is maintained.

Claim Rejections - 35 U.S.C. § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1, 2, 4-8, 10-20, and 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Staats (US 6,373,821).

Regarding Claim 1, Staats'821 teaches transmitting information from a source device at a predetermined rate comprising forming x number of first data blocks wherein each of the first data blocks contains n units of data (267 packets/frame; col. 6, lines 7+), and forming y number of second data blocks wherein each of the second data blocks contains m units of data (266 packets/frame) wherein m is not equal to n. Staats'821 further teaches that each data stream contains these data packets in which 267 packets/frame of data is transmitted and sometimes 266 are need to be transmitted. This inherently teaches combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate, wherein the first data blocks and the second data blocks are of a same type and have the same characteristics (video data). As for the limitation of the x number of first data blocks are evenly distributed among the y number of second data blocks, the examiner believes Staats teaches this concept. In order to produce an IEEE-1394 serial bus standard, Staats teaches that the NTSC compatibility requires the data stream to equal 266.973, as discussed above. In order to achieve this data rate, uniformity in the data stream is inherent in the system of Staats. Staats discloses that after a certain number of x data blocks (267) are present in the data stream, a jump command includes the y data block (266) into the stream. Therefore, to maintain a proper stream, uniformity of the data blocks must be present. Since the data stream is not restricted to a time period, over time the data stream will eventually repeat itself, thereby producing an

evenly distributed x and y data blocks having first and second frames forming a repeating pattern within the data stream. Table 1 explains calculating a ratio of first data blocks to second data blocks to achieve the predetermined rate.

The applicant argues that the prior art fails to teach forming x number of first data blocks each containing n units of data, forming y number of second data blocks each containing m units of data and combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate and evenly distributing the x number data blocks among the y number of data blocks. Closely reviewing the Staats reference, the examiner still believes that the prior art teaches the applicants claimed limitations. Staats teaches in Table 1 equations used in determining when to transmit data blocks. Although Staats used 266.5 for example purposes, the examiner uses 266.973 (which is closest to 267) as discussed in column 6, lines 10+. Beginning in cycle 0, the data is given below:

		Cycles begins	Δ
267	(266.973)(0) + 2 = 2	0	0
267	(266.973)(1) + 2 = 268.973	267	.027
267	(266.973)(2) + 2 = 535.946	534	.054
	.		
	.		
	.		
	(266.973)(10) + 2 = 2671.73	2670	.27
	.		
	.		
	.		
267	(266.973)(35) + 2 = 9346.055	9345	.945
267	(266.973)(36) + 2 = 9613.028	9612	.972
267	(266.973)(37) + 2 = 9880.001	9879	.999
267	(266.973)(38) + 2 = 10146.974	10146	1.026
266	(266.973)(39) + 2 = 10413.947	10412	.053
	.		

267	(266.973)(75) + 2 = 20024.975	20024	1.025
266	(266.973)(76) + 2 = 20297.948	20290	.052

Staats uses 266.5 for convenience in showing when to include 266 and 267 data packets in the data stream. However, the examiner uses the targeted value 266.973. In this case, after calculating the first two values, the cycle repeats every 37th packet. As shown above when x=2, 39, 76, etc, the DCL jump command will include packet 266 and will repeat over time (see col. 8-col. 9). This reads on the limitation of calculating a ratio of first data blocks to second data blocks to achieve the predetermined rate (37:1) and evenly distributing x number of first data blocks among the y number of second data blocks thereby forming a repeating pattern of the first data blocks and second data blocks within the data stream.

Regarding Claim 2, Staats'821 teaches transmitting the data stream from the source device at the predetermined rate (col. 10, lines 57+ teaches the host is programmed to begin transmission of data at a desired cycle).

Regarding Claim 4, Staats'821 teaches digital video data (col. 3, lines 30-33).

Regarding Claim 5, Staats'821 teaches n, m, x, and y are integer values (x and y are each frame, and n and m are 266 and 267).

Claim 6 is analyzed and discussed with respect to Claim 1 (source and receiving devices are the host computer and camera).

Claim 7 is analyzed and discussed with respect to Claim 5. (See rejection of Claim 5 above.)

Claim 8 is analyzed and discussed with respect to Claim 2 with the further limitation of the data stream conforming to the standards of an IEEE 1394-1995 network (col. 3, lines 24+).

Claim 10 is analyzed and discussed with respect to Claim 8. (See rejection of Claim 8 above.)

Regarding Claim 11, Staats'821 teaches the source and receiving device are coupled together within a network (see fig. 1).

Claim 12 is analyzed and discussed with respect to Claim 8. (See rejection of Claim 8 above.)

Claim 13 is analyzed and discussed with respect to Claim 1. (See rejection of Claim 1 above.)

Claim 14 is analyzed and discussed with respect to Claim 5. (See rejection of Claim 5 above.)

Regarding Claim 15, Staats'821 teaches an interface coupled to the controller and configured for connecting to a network (fig. 1, 12).

Claim 16 is analyzed and discussed with respect to Claim 8. (See rejection of Claim 8 above.)

Claim 17 is analyzed and discussed with respect to Claim 1. (See rejection of Claim 1 above.)

Claim 18 is analyzed and discussed with respect to Claim 5. (See rejection of Claim 5 above.)

Claim 19 is analyzed and discussed with respect to Claim 6 (see also col. 8, lines 15-16). (See rejection of Claim 6 above.)

Claim 20 is analyzed and discussed with respect to Claims 6 and 19 . (See rejection of Claims 6 and 19 above.)

Claim 23 is analyzed and discussed with respect to Claim 8. (See rejection of Claim 8 above.)

Claim 24 is analyzed and discussed with respect to Claims 6 and 11. (See rejection of Claims 6 and 11 above.)

Claim 25 is analyzed and discussed with respect to Claim 8. (See rejection of Claim 8 above.)

Regarding Claims 28-31, Staats teaches in order for the data stream to be transferred to a receiving device, it must comply with the IEEE-1394 Serial Bus Standard such that the receiving device may properly receive the data stream (col. 4, lines 57+). Therefore, a determination is made such that appropriate transmission is performed.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 21-22, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staats'821.

Regarding Claim 21, Staats'821 does not specifically disclose the predetermined rate is 29.97 frames per second. However, it is notoriously well known in the art to transmit signal conforming to standard television signals (29.97 frames per second). By performing this method allows for images to be seen on a monitor desirably. Therefore, it would have been obvious to one having ordinary skill in the art to have the predetermined rate to be 29.97 frames per second.

Regarding Claim 22, Staats'821 teaches the x packets represent 267 packets and the y packets represent 266 packets as discussed in Claim 1, but fails to specifically disclose the plurality of second frames are 9336 frames and the plurality of second frames are 664 frames. However, this is an obvious matter of design choice by the manufacturer at the time of production to manufacture such values with respect to the transmission scheme, for it does not change the scope of the invention.

Claims 26 and 27 are analyzed and discussed with respect to Claims 1 and 8. Although Staats'821 teaches 267 packets and 266 packets as discussed in Claim 1, Staats'821 fails to specifically disclose the first frames are 9336 frames and second frames are 664 frames. However, this is an obvious matter of design choice by the manufacturer at the time of production to manufacture such values with respect to the transmission scheme, for it does not change the scope of the invention.

Furthermore, Staats'821 does not specifically disclose the predetermined frame rate is 29.97 frames per second. However, it is notoriously well known in the art to transmit signal conforming to standard television signals (29.97 frames per second). By performing this method allows for images to be seen on a monitor desirably. Therefore, it would have been obvious to one having ordinary skill in the art to have the predetermined rate to be 29.97 frames per second.

Claim 32 is analyzed and discussed with respect to Claim 28. (See rejection of Claim 28 above.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline Wilson whose telephone number is (703) 308-5080. The examiner can normally be reached on 8:30am-5:00pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JBW

05/28/04

WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	Group Art Unit: 2612
Quan Vu et al.	Examiner: Wilson, J.
Serial No. 09/249,642	
Filed: February 12, 1999	**PRELIMINARY AMENDMENT**
For: **METHOD OF AND APPARATUS FOR GENERATING A PRECISE FRAME RATE IN DIGITAL VIDEO TRANSMISSION FROM A COMPUTER SYSTEM TO A DIGITAL VIDEO DEVICE**	162 N. Wolfe Rd. Sunnyvale, CA 94086 (408) 530-9700 Customer Number: 28960

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Sir:

Please amend the subject application as follows:

AMENDMENTS

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 8 of this paper.

CERTIFICATE OF MAILING (37 CFR§ 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP.

Date: 4/30/04 By: _____

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method of transmitting information from a source device at a predetermined rate, the method comprising:
   a. calculating a ratio of first data blocks to second data blocks to achieve the predetermined rate;
   b. forming x number of the first data blocks wherein each of the first data blocks contains n units of data;
   ~~b.~~ c. forming y number of the second data blocks wherein each of the second data blocks contains m units of data, and further wherein m is not equal to n; and
   ~~c.~~ d. combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate, wherein the first data blocks and the second data blocks are of a same type and have same characteristics and further wherein the x number of first data blocks are evenly distributed among the y number of second data blocks thereby forming a repeating pattern of the first data blocks and the second data blocks within the data stream.

2. (original) The method according to claim 1 further comprising transmitting the data stream from the source device at the predetermined rate.

3. (previously cancelled)

4. (original) The method according to claim 1 wherein the data stream is digital video data.

5. (original) The method according to claim 1 wherein n, m, x, and y are integer values.

6. (currently amended) A method of transmitting information from a source device to a receiving device, the method comprising:
   a. calculating a ratio of first frames to second frames to achieve a predetermined frame rate;

b. forming x number of the first frames wherein each of the first frames contains n units of data;

~~b.~~ c. forming y number of the second frames wherein each of the second frames contains m units of data, and further wherein m is not equal to n;

~~c.~~ d. combining x number of the first frames and y number of the second frames into a stream of frames to achieve ~~a~~ the predetermined frame rate by evenly distributing the x number of the first frames among the y number of the second frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames; and

~~d.~~ e. transmitting the stream of frames from the source device to the receiving device; wherein the first frames and the second frames are of a same type and have same characteristics.

7. (original) The method according to claim 6 wherein n, m, x, and y are integer values.

8. (original) The method according to claim 6 further comprising receiving the stream of frames from the network by the receiver at a predetermined frame rate and wherein the data stream conforms to standards of an IEEE 1394-1995 network.

9. (previously cancelled)

10. (original) The method according to claim 6 wherein the stream of frames conforms to standards of an IEEE 1394-1995 network.

11. (original) The method according to claim 6 wherein the source device and the receiving device are coupled together within a network.

12. (original) The method according to claim 11 wherein the network is an IEEE 1394-1995 network.

13. (currently amended) A source device for transmitting information at a predetermined frame rate, the source device comprising a controller for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing a plurality of the first frames each including x packets of data and a plurality of the second frames

each including y packets of data to achieve the predetermined frame rate, wherein the data stream is transmitted at the predetermined frame rate and y is not equal to x and further wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are evenly distributed among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream.

14. (original) The source device according to claim 13 wherein x and y are integer values.

15. (original) The source device according to claim 13 further comprising an interface coupled to the controller and configured for connecting to a network.

16. (original) The source device according to claim 15 wherein the network is a IEEE 1394-1995 network.

17. (currently amended) A system for transmitting information at a predetermined frame rate, the system comprising:

a. a source device for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing a plurality of the first frames each including x packets of data and a plurality of the second frames each including y packets of data to achieve the predetermined frame rate and y is not equal to x, wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are evenly distributed among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream; and

b. a remote receiver coupled to the source device and configured to receive the data stream at the predetermined frame rate.

18. (original) The system according to claim 17 wherein x and y are integer values.

19. (previously amended) The system according to claim 17 wherein the source device is a computer system.

20. (original) The system according to claim 17 wherein the remote receiver is a digital video camera.

21. (original) The system according to claim 17 wherein the predetermined frame rate is 29.97 frames per second.

22. (original) The system according to claim 17 wherein the plurality of first frames are 9336 frames, x packets represent 267 packets, the plurality of second frames are 664 frames, and y packets represent 266 packets.

23. (original) The system according to claim 17 wherein the data stream conforms to standards of an IEEE 1394-1995 network.

24. (original) The system according to claim 17 further comprising a network coupled between the source device and the remote receiver and configured to transmit the data stream.

25. (original) The system according to claim 24 wherein the network is an IEEE 1394-1995 network.

26. (currently amended) A system for transmitting information at a predetermined frame rate equal to 29.97 frames per second within an IEEE 1394 network of devices, the system comprising:

a. a source device for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing 9336 first frames, each including 267 packets of data, and 664 second frames, each including 266 packets of data, to achieve the predetermined frame rate of 29.97 frames per second, wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are evenly distributed among the y number of second data blocks thereby forming a repeating pattern of first frames and second frames within the data stream; and

b. a remote receiver coupled to the source device by the IEEE 1394 network of devices, wherein the remote receiver receives the data stream from the source device at the predetermined frame rate.

27. (currently amended) A method of transmitting information from a source device to a receiving device over an IEEE 1394 network of devices, the method comprising:

a. calculating a ratio of first frames to second frames;

b. forming 9336 first frames wherein each of the first frames contains 267 packets of data;

~~b.~~ c. forming 664 second frames wherein each of the second frames contains 266 packets of data;

~~c.~~ d. combining the 9336 first frames and the 664 second frames into a stream of frames to achieve a predetermined frame rate of 29.97 frames per second by evenly distributing the second frames among the first frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames; and

~~d.~~ e. transmitting the stream of frames from the source device to the receiving device over the IEEE 1394 network of devices;

wherein the first frames and the second frames are of a same type and have same characteristics.

Please add the following new claims:

28. (new) The method according to claim 1 wherein the predetermined rate is determined by a receiving device which receives the data stream.

29. (new) The method according to claim 6 wherein the predetermined frame rate is determined by the receiving device.

30. (new) The source device according to claim 13 wherein the predetermined rate is determined by a receiving device which receives the data stream.

31. (new) The system according to claim 17 wherein the predetermined frame rate is determined by the remote receiver.

32. (new) The system according to claim 26 wherein the predetermined frame rate is determined by the remote receiver.

REMARKS

Applicants respectfully request further examination and reconsideration in view of the above amendments and the arguments set forth fully below. Claims 1, 2, 4-8, and 10-27 were pending. Within the Office Action, Claims 1, 2, 4-8, and 10-27 have been rejected. By the above amendment, Claims 1, 6, 13, 17, 26 and 27 have been amended and new Claims 28-32 have been added. Accordingly, Claims 1, 2, 4-8 and 10-32 are currently pending in this application.

Rejections Under 35 U.S.C. § 102

Within the previous Office Action, Claims 1, 2, 4-8, 10-20 and 23-25 were rejected under 35 U.S.C. §102 (e) as being anticipated by U.S. Patent No. 6,373,821 to Staats (hereinafter "Staats"). Staats teaches a method for setting a time stamp in the SYT field of packet headers for IEEE-1394 devices. Staats teaches stamping isochronous data packets with a presentation time stamp value determined according to a computed packet rate for the data. Staats teaches that a computed packet rate for the data can be a non-integer value. To achieve this non-integer value, Staats teaches using a data stream command language. The data stream command language is a set of commands that control data flow into or out of a data stream. Staats teaches that the data stream command language jump commands are used to allow a transmitter to send a frame with a different number of packets. Staats does not teach forming x number of first data blocks each containing n units of data, forming y number of second data blocks each containing m units of data and combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate.

Within the previous Office Action, in the response to arguments section, it is stated that Staats specifically teaches that the transmitter needs to send 266 packets and sometimes send 267 packets. It is then stated that this is synonymous to the claimed first and second data blocks with n and m units of data. The applicants respectfully disagree. Staats teaches that sometimes the transmitter will need to send 266 packets/frame and sometimes 267 packets/frame. [Staats, col. 6, lines 7-16] Staats does not teach forming x number of first data blocks each containing n units of data, forming y number of second data blocks each containing m units of data and combining x

number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate. Staats also does not teach evenly distributing the x number of first data blocks among the y number of second data blocks. As described above, Staats only teaches that sometimes the transmitter will need to send 266 packets/frame and sometimes 267 packets/frame.

Within the previous Office Action, also in the response to arguments section, it is stated that the term "sometimes" is believed to be used to teach that 267 packets are placed in the stream at certain times in order to produce the NTSC compatible signal but not placed in the stream as constantly as 266 packets, thus, maintaining a proper stream of data. It is further stated within the Office Action that this is still synonymous to the claimed first and second data blocks with n and m units of data and to the claimed "evenly distributed." The applicants respectfully disagree. There is no teaching within Staats regarding evenly distributing the x number of first data blocks among the y number of second data blocks. Further, there is no hint, teaching or suggestion, within Staats to even support an obviousness rejection of evenly distributing the x number of first data blocks among the y number of second data blocks.

Within the previous Office Action, it is stated that uniformity in the data stream is inherent in the system of Staats. The applicants respectfully disagree. Staats teaches that the system determines when the driver should be notified to vary the default number of packets per frame, on a frame by frame basis. [Staats, col. 8, lines 21-67] Specifically, Staats teaches calculating a delta value for each frame, such that if the delta value is equal to or greater than one, a frame with 267 packets is transmitted and if the delta value is less than one, a frame with 266 packets is transmitted. [Staats, col. 8, lines 54-61] In the example, illustrated in Table 1 of Staats, three frames with 266 packets are followed by one frame of 267 packets, then one frame of 266 frames and then one frame of 267 packets. Accordingly, as shown in this example, within the patent itself Staats does not teach that the frames with 267 packets are **evenly distributed** with the frames with 266 packets within the data stream, as claimed in the present claims. Further, Staats teaches calculating an SYT value for a current frame and then calculating the delta value for the current frame, on a frame by frame basis. **Staats does not teach evenly distributing x number of first data blocks among y number of second data blocks thereby forming a repeating pattern of the first data blocks and the second data blocks within the data stream.**

Within the previous Office Action, it is further argued that over the time period of one hour, the sequence of data blocks will eventually repeat itself. The applicants respectfully disagree. *The applicants also question where support within Staats for such a conclusion can be found. No where is this taught, hinted at or suggested in the actual teachings of Staats.* As discussed above, Staats teaches calculating the delta value for each frame and making a determination based on the delta value as to whether a frame with 267 packets or a frame with 266 packets should be transmitted. Based on this scheme taught by Staats, one cannot **assume** that a pattern will repeat over time, no matter how long the time period. In fact, Staats goes further and even describes what happens when a cycle is missed. The repeating sequence argument, made within the Office Action, does not take such events into account and thus fails when the actual teachings of Staats are analyzed.

Staats teaches determining, on a frame by frame basis, what number of packets will be included within a frame. Staats does not teach **evenly distributing** x number of first data blocks among the y number of second data blocks. Within the previous Office Action, an opinion about what is inherent in the teachings of Staats is all that is used to support a rejection of the claims. However, this opinion is not based on or supported by the actual teachings of Staats, but instead is based on conjecture and examples of how a system of Staats is **assumed** to operate. This can not form a proper basis of a rejection of the claims of the present invention.

There is nothing in the teachings of Staats that supports an anticipation rejection under 35 U.S.C. § 102 of claims with such limitations. **Staats simply does not teach evenly distributing the x number of first data blocks among the y number of second data blocks.** Staats also does not teach that this even distribution forms a repeating pattern of the first data blocks and the second data blocks within the data stream. **As described above, Staats teaches determining the number of packets per frame on a frame by frame basis using a calculated delta value.** Also, as described above, the example shown in Table 1 of Staats does not show an even distribution or a repeating pattern. Further, there is no hint, teaching or suggestion to even warrant an obviousness determination. To do so would be to impermissibly use hindsight to make a rejection based on obviousness. The Court of Appeals for the Federal Circuit has stated that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." In Re Fritch, 972 F.2d, 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Based on the teachings of Staats, it would not have been obvious to evenly distribute the x number of first data blocks among the y number of second data blocks thereby forming a repeating pattern of the first

data blocks and the second data blocks within the data stream. To conclude that this is obvious based on the teachings of Staats, is to use hindsight based on the teachings of the present invention and to read much more into the teachings of this cited reference than its actual teachings. This is simply not permissible based on the directive from the Court of Appeals for the Federal Circuit. All that Staats teaches is that "[t]o achieve an overall $M_{av} = 266.5$, sometimes the transmitter will need to send 266 packets/frame and sometimes 267 packets/frame." [Staats, col. 6, lines 12-14] There is no hint, teaching or suggestion within Staats to justify a conclusion that it is obvious to **evenly distribute** the 266 packets/frame among the 267 packets/frame.

In contrast to the teachings of Staats, the present invention is directed to a method of and apparatus for transmitting an isochronous video stream of data at a particular frame rate from a source device to a receiving device. The source device preferably determines a proper ratio of data packets versus video frames in response to the particular frame rate required and a cycle time for isochronous data. This proper ratio of data packets versus video frames rarely computes to an integer result. Accordingly, once the proper ratio of data packets versus video frames is determined, the source device preferably generates two groups of frames. A first group contains an integer value of packets nearest to and above the desired overall average ratio of data packets versus video frames. The source device also generates a second group of frames where each frame from this second group contains an integer value of packets nearest to and below the ratio of packets versus video frames. In order to achieve the desired frame rate, the source device generates a frame ratio containing a specific number of frames from the first group and the second group and forms the isochronous stream of video data. Accordingly, the frames from the first group and the frames from the second group are of a same type and have the same characteristics. The source device serially generates each of the frames in an order including a combination of the first group of frames and the second group of frames to achieve the overall desired average frame ratio. The source device then transmits the resulting isochronous video stream of data to the receiving device at the desired frame rate. As described above, Staats does not teach forming x number of first data blocks each containing n units of data, forming y number of second data blocks each containing m units of data and combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate. **Staats also does not teach evenly distributing the x number of first data blocks among the y number of second data blocks thereby forming a repeating pattern of the first data blocks and the second data blocks within the data stream.**

As described above, Staats teaches determining, on a frame by frame basis, what number of packets will be included within a frame. The teachings of Staats require this determination to be made for every frame. In contrast to the teachings of Staats, the present invention calculates a ratio of first frames and second frames in response to the particular frame rate. Staats does not teach calculating a ratio of first frames and second frames. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. In order to further the prosecution of the present application, this limitation has been added to each of the independent claims.

The independent Claim 1 is directed to a method of transmitting information from a source device at a predetermined rate. The method of Claim 1 comprises calculating a ratio of first data blocks to second data blocks to achieve the predetermined rate, forming x number of the first data blocks wherein each of the first data blocks contains n units of data, forming y number of the second data blocks wherein each of the second data blocks contains m units of data, and further wherein m is not equal to n and combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate. Claim 1 includes the further limitation that the first data blocks and the second data blocks are of a same type and have same characteristics. Claim 1 also includes the limitation that the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first data blocks and the second data blocks within the data stream. As described above, Staats does not teach forming x number of first data blocks each containing n units of data, forming y number of second data blocks each containing m units of data and combining x number of first data blocks and y number of second data blocks into a data stream to achieve the predetermined rate. As also described above, Staats does not teach that the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first data blocks and the second data blocks within the data stream. Further, Staats does not teach calculating a ratio of first data blocks to second data blocks to achieve the predetermined rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 1 is allowable over the teachings of Staats.

Claims 2, 4 and 5 are all dependent upon the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Staats. Accordingly, Claims 2, 4 and 5 are all also allowable as being dependent upon an allowable base claim.

The independent Claim 6 is directed to a method of transmitting information from a source device to a receiving device. The method of Claim 6 comprises calculating a ratio of first frames to second frames to achieve a predetermined frame rate, forming x number of the first frames wherein each of the first frames contains n units of data, forming y number of the second frames wherein each of the second frames contains m units of data and further wherein m is not equal to n, combining x number of the first frames and y number of the second frames into a stream of frames to achieve the predetermined frame rate by **evenly distributing** the x number of the first frames among the y number of the second frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames and transmitting the stream of frames from the source device to the receiving device. Claim 6 includes the further limitation that the first frames and the second frames are of a same type and have same characteristics. As described above, Staats does not teach forming x number of first frames wherein each of the first frames contains n units of data, forming y number of second frames wherein each of the second frames contains m units of data and combining x number of the first frames and y number of the second frames into a stream of frames to achieve a predetermined rate. As discussed above, Staats also does not teach **evenly distributing** the x number of first frames among the y number of second frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames. Further, Staats does not teach calculating a ratio of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 6 is allowable over the teachings of Staats.

Claims 7, 8 and 10-12 are all dependent upon the independent Claim 6. As discussed above, the independent Claim 6 is allowable over the teachings of Staats. Accordingly, Claims 7, 8 and 10-12 are each also allowable as being dependent upon an allowable base claim.

The independent Claim 13 is directed to a source device for transmitting information at a predetermined frame rate. The source device of Claim 13 comprises a controller for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing a plurality of the first frames each including x packets of data and a plurality of the second frames each including y packets of data to achieve the predetermined frame rate, wherein the data stream is transmitted at the predetermined frame rate and y is not equal to x. Claim 13 includes the further limitation that the first frames and the second frames are of a same type and have same characteristics. It is also specified in Claim 13 that the x number of first data blocks are **evenly distributed** among the y number of second data blocks

thereby forming a repeating pattern of the first frames and the second frames within the data stream. As described above, Staats does not teach generating a data stream including a plurality of first frames each including x packets of data and a plurality of second frames each including y packets of data to achieve the predetermined frame rate. As also described above, Staats does not teach that the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream. Further, Staats does not teach calculating a ratio of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 13 is allowable over the teachings of Staats.

Claims 14-16 are all dependent upon the independent Claim 13. As discussed above, the independent Claim 13 is allowable over the teachings of Staats. Accordingly, Claims 14-16 are each also allowable as being dependent upon an allowable base claim.

The independent Claim 17 is directed to a system for transmitting information at a predetermined frame rate. The system of Claim 17 comprises a source device for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing a plurality of first frames each including x packets of data and a plurality of second frames each including y packets of data to achieve the predetermined frame rate and y is not equal to x, wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream, and a remote receiver coupled to the source device and configured to receive the data stream at the predetermined frame rate. As described above, Staats does not teach generating a data stream containing a plurality of first frames each including x packets of data and a plurality of second frames each including y packets of data to achieve the predetermined frame rate and y is not equal to x. As discussed above, Staats also does not teach that the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of the first frames and the second frames within the data stream. Further, Staats does not teach calculating a ratio of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 17 is allowable over the teachings of Staats.

Claims 18-20 and 23-25 are all dependent on the independent Claim 17. As discussed above, the independent Claim 17 is allowable over the teachings of Staats. Accordingly, Claims 18-20 and 23-25 are each also allowable as being dependent upon an allowable base claim.

Rejections Under 35 U.S.C. § 103

Within the previous Office Action, Claims 21, 22, 26 and 27 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Staats. Claims 21 and 22 are both dependent on the independent Claim 17. As discussed above, the independent Claim 17 is allowable over the teachings of Staats. Accordingly, Claims 21 and 22 are both also allowable as being dependent upon an allowable base claim.

The independent Claim 26 is directed to a system for transmitting information at a predetermined frame rate equal to 29.97 frames per second within an IEEE 1394 network of devices. The system of Claim 26 comprises a source device for calculating a ratio of first frames to second frames to achieve the predetermined frame rate and generating a data stream containing 9336 first frames, each including 267 packets of data, and 664 second frames, each including 266 packets of data, to achieve the predetermined frame rate of 29.97 frames per second, wherein the first frames and the second frames are of a same type and have same characteristics and the x number of first data blocks are **evenly distributed** among the y number of second data blocks thereby forming a repeating pattern of first frames and second frames within the data stream, and a remote receiver coupled to the source device by the IEEE 1394 network of devices, wherein the remote receiver receives the data stream from the source device at the predetermined frame rate. As recognized with the Office Action, Staats fails to disclose a data stream containing 9336 first frames and 664 second frames. It is stated in the Office Action that this is an obvious matter of design choice. The applicants respectfully disagree. Staats cites an NTSC compatible device with 266.973 data packets per frame, as an example. [Staats, col. 5, line 64 - col. 6, line 12] However, as discussed above, Staats only teaches that sometimes the transmitter will need to send 266 packets/frame and sometimes 267 packets/frame. As evidence that the limitation of a data stream containing 9336 first frames, each including 267 packets of data, and 664 second frames, each including 266 packets of data, is not an obvious design choice, even though Staats cites as an example an NTSC compatible device with 266.973 data packets per frame, Staats does not describe such a data stream with 9336 first frames and 664 second frames. As discussed

above, Staats only teaches that sometimes the transmitter will need to send 266 packets/frame and sometimes 267 packets/frame. Accordingly, Staats does not teach or make obvious a source device for generating a data stream containing 9336 first frames, each including 267 packets of data, and 664 second frames, each including 266 packets of data. As discussed above, Staats also does not teach or make obvious **evenly distributing** the x number of first frames among the y number of second frames thereby forming a repeating pattern of first frames and second frames within the data stream. Further, Staats does not teach calculating a ratio of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 26 is allowable over the teachings of Staats.

The independent Claim 27 is directed to a method of transmitting information from a source device to a receiving device over an IEEE 1394 network of devices. The method of Claim 27 comprises calculating a ratio of first frames to second frames, forming 9336 first frames wherein each of the first frames contains 267 packets of data, forming 664 second frames wherein each of the second frames contains 266 packets of data, combining the 9336 first frames and the 664 second frames into a stream of frames to achieve a predetermined frame rate of 29.97 frames per second by **evenly distributing** the second frames among the first frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames and transmitting the stream of frames from the source device to the receiving device over the IEEE 1394 network of devices, wherein the first frames and the second frames are of a same type and have same characteristics. As described above, Staats does not teach or make obvious forming 9336 first frames wherein each of the first frames contains 267 packets of data, forming 664 second frames wherein each of the second frames contains 266 packets of data and combining the 9336 first frames and the 664 second frames into a stream of frames to achieve a predetermined frame rate of 29.97 frames per second. As also described above, Staats does not teach **evenly distributing** the second frames among the first frames thereby forming a repeating pattern of the first frames and the second frames within the stream of frames. Further, Staats does not teach calculating a ratio of first frames to second frames to achieve a predetermined frame rate. As discussed above, Staats teaches determining a number of packets for each frame, on a frame by frame basis. For at least these reasons, the independent Claim 27 is allowable over the teachings of Staats.

For the reasons given above, Applicants respectfully submit that all of the claims are in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
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